

REMARKS

This paper is submitted in reply to the Office Action dated June 13, 2006, within the three-month period for response. Reconsideration and allowance of all pending claims are respectfully requested.

In the subject Office Action, claims 37-39 were rejected under 35 U.S.C. § 101. Additionally, claims 1-4, 9, 11-12, 21-26, 30 and 36-39 were rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,819,265 to Ravin et al.; claims 5-8, 10, 13-14, 16, 18-20, 27-29 and 31-35 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Ravin et al. in view of U.S. Patent No. 6,678,694 to Zimmermann et al.; claim 15 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Ravin et al. in view of U.S. Patent No. 5,799,276 to Komissarchik et al.; claim 17 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Ravin et al. in view of U.S. Patent No. 6,519,586 to Anick et al.; and claims 42-43 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Ravin et al. in view of U.S. Patent No. 5,819,265 to Angiulo et al.

Applicants respectfully traverse the Examiner's rejections to the extent that they are maintained. Applicants have canceled claim 38, amended claims 37 and 39, and added new claim 44. Applicants respectfully submit that no new matter is being added by the above amendments, as the amendments are fully supported in the specification, drawings and claims as originally filed.

Now turning to the subject Office Action, and specifically to the § 101 rejection of claims 37-39, the Examiner will note that Applicants have amended claims 37 and 39 to recite a "physical" computer readable signal bearing medium, which is consistent with the Examiner's position. Claim 38 has also been canceled. Withdrawal of the §101 rejection is therefore respectfully requested.

Next, turning to the art-based rejections, and specifically to the Examiner's rejection of independent claim 1, this claim generally recites a computer-implemented method of analyzing linguistic terms. The method includes scanning a plurality of documents for variants of a linguistic term, and tracking relative occurrences of a plurality of variants of the linguistic term found in the plurality of documents during

scanning to determine an acceptable usage of the linguistic term, wherein each variant of the linguistic term found in each document is of the type that is intentionally chosen by an author of such document.

In rejecting claim 1, the Examiner argues that Ravin discloses the scanning of documents for variants of a linguistic term, and the tracking of relative occurrences of a plurality of variants during scanning to determine an acceptable usage of the linguistic term, citing col. 3, lines 1-16, col. 6, lines 37-45, col. 7, lines 8-31 and col. 7, line 60 to col. 8, line 9.

However, Ravin merely discloses a system for identifying proper names in individual documents, and is not directed to attempting to discern an acceptable usage for a linguistic term based upon occurrences of variants of that term in a plurality of documents. To the extent that variants are detected in Ravin, the variants are merely used to identify a name as being a proper name, and not to determine any particular acceptable usage for a linguistic term, as required by claim 1.

Claim 1 specifically recites "tracking relative occurrences of a plurality of variants of the linguistic term found in [a] plurality of documents during scanning to determine an acceptable usage of the linguistic term," a feature that is not disclosed or suggested by Ravin. For example, Applicants can find no disclosure in the cited passages of Ravin, or elsewhere in the reference, of the concept of tracking "relative occurrences" of variants of a linguistic term. An "occurrence", in this context, relates to the presence of a variant in a scanned document, and a "relative" occurrence relates to the relative frequency or number of occurrences that a particular variant occurs in comparison to other variants of the linguistic term. As such, "tracking relative occurrences" is not merely the detection of a variant in a document, but is additionally some form of statistical collection that can be used to identify how commonly a particular variant is used "relative" to other variants.

The cited passages in Ravin, in contrast, disclose the use of an equivalence processor to identify different canonical forms of a word in a single document. The cited passages at col. 6, lines 37-45 and col. 7, lines 8-31, for example, disclose an equivalence recognition processor that builds a list of equivalent name occurrences. The cited passage at col. 7, line 60 to col. 8, line 9 likewise discloses an equivalence recognition process

that groups elements that refer to the same entity. Of note, the equivalence recognition process is disclosed in more detail in connection with Figs. 11-12, at col. 14, line 11 to col. 16, line 49, and at no point in this passage is the concept of tracking "relative occurrences" disclosed or suggested. Indeed, it is evident from this passage that the purpose of equivalence recognition is to combine variants so that the variants identify the same proper name, rather than mistakenly identifying multiple names.

In addition, the step of "tracking relative occurrences" in claim 1 occurs for variants "found in [a] plurality of documents during scanning." Put another way, the tracking of relative occurrences occurs over a "plurality of documents", and not over each individual document. Given that the purpose of tracking the occurrences in claim 1 is "to determine an acceptable usage," the tracking of occurrences over multiple documents is an important feature for determining how different variants are used by different people, and thus, whether or not a variant is considered an acceptable usage.

Ravin, in contrast, does not track occurrences of variants of a term "found in [a] plurality of documents during scanning." The cited passages disclose processing documents individually, which is understandable given the purpose of Ravin is to identify proper names in each document.

Furthermore, the step of "tracking relative occurrences" in claim 1 occurs for the purpose of "determin[ing] an acceptable usage for [a] linguistic term." As described at page 6, lines 11-18 of the Application:

the determination of an acceptable usage of a linguistic term may or may not represent the only permissible usage of that term. For example, in many instances, a newly-coined word may not have a single "accepted" usage – rather, multiple acceptable usages may develop among different groups of users. An acceptable usage may correspond to the most common usage of a term, although in some instances, an acceptable usage may be determined based upon the frequency of occurrence of that usage exceeding a certain threshold, or based on the type of audience, e.g., slang or formal.

Ravin, in contrast, does not attempt to determine whether a variant for a linguistic term is an acceptable usage for that term. The cited passages merely attempt to aggregate variants so that the variants point to a single proper name that is common to all variants. There is no concern or appreciation of the desirability of determining whether a particular variant is or is not an "acceptable" usage of a proper name in Ravin.

Accordingly, Applicants submit that Ravin does not disclose or suggest each and every feature of claim 1.

Applicants also submit that it would not be obvious to modify Ravin to track relative occurrences of variants of a linguistic term in multiple documents to determine an acceptable usage of the linguistic term given that Ravin is directed toward identifying proper names in individual documents, and effectively combining variants to point to the same proper name so that different variants do not identify different proper names. Since Ravin is directed to processing individual documents, there would be no motivation to perform any tracking across multiple documents in Ravin. Such a modification would provide no recognizable benefit to achieving the solution sought in Ravin. The Examiner has also presented no objective evidence that one of ordinary skill in the art would be motivated to modify Ravin in the manner suggested by the Examiner, and as such, the Examiner has failed to establish a *prima facie* case of obviousness as to claim 1.

Reconsideration and allowance of claim 1, and of claims 2-22 which depend therefrom, are therefore respectfully requested.

Next with respect to independent claim 23, this claim generally recites a method of analyzing linguistic terms. The method includes browsing a plurality of web sites on the Internet in response to user input, and concurrently with browsing the plurality of web sites, tracking relative occurrences of a plurality of variants of a linguistic term found in the plurality of web sites to determine an acceptable usage of the linguistic term, wherein each variant of the linguistic term found in each web site is of the type that is intentionally chosen by an author of such web site.

As such, like claim 1, claim 23 recites the concept of tracking relative occurrences of variants of a linguistic term in multiple documents (here, web sites) for the purpose of

determining an acceptable usage of the linguistic term. As discussed above in connection with claim 1, this combination of features is not disclosed or suggested by Ravin.

Moreover, claim 23 recites "browsing a plurality of web sites on the Internet in response to user input," with such browsing occurring "concurrently" with the tracking of relative occurrences. Of note, the Examiner does not even address the concept of these two steps being performed "concurrently," as required by claim 23, and for this reason, the rejection is deficient on its face.

In addition, the passage relied upon by the Examiner for allegedly disclosing browsing the Internet, at col. 23, lines 52-58, merely discloses scanning news articles and other online documents to identify proper names in such documents. There is no disclosure or suggestion in this passage as to "browsing" the Internet, or of tracking relative occurrences of variants of a term "concurrently" with such browsing. An advantage of the invention recited in claim 23 is that a user can track the occurrences of variants while browsing the Internet, and often without even being aware that such tracking is being performed. There is no appreciation of such a concept in Ravin, and as such, claim 23 is non-obvious over the reference.

Applicants therefore respectfully submit that independent claim 23 is non-obvious over Ravin et al. and the other prior art of record. Reconsideration and allowance of claim 23 are therefore respectfully requested.

Next with respect to independent claims 24 and 37, each of these claims generally recites the concept of determining an acceptable usage of a linguistic term at least in part by tracking relative occurrences of a plurality of variants of the linguistic term, where those variants are of the type that are intentionally chosen by authors of scanned documents where those variants are found. As discussed above in connection with claim 1, this concept is not disclosed or suggested by Ravin.

Specifically, Ravin does not disclose "determining an acceptable usage of a linguistic term." Instead, Ravin is concerned merely with identifying proper names in a document. Ravin also does not disclose determining an acceptable usage "by tracking relative occurrences of a plurality of variants of the linguistic term found in [a] plurality of documents during scanning." Ravin, at the most, detects variants in individual

documents, but the reference does not disclose tracking relative occurrences of such variants, nor does the reference disclose doing so for variants "found in [a] plurality of documents during scanning."

Accordingly, claims 24 and 37 are patentable over the prior art of record for the same reasons presented above for claim 1. Reconsideration and allowance of claims 24 and 37, as well as of claims 25-36 which depend respectively therefrom, are therefore respectfully requested.

Next turning to the rejection of independent claim 39, this claim generally recites a program product that includes a document, and a physical computer-readable signal bearing medium bearing the document. The document includes a tag that identifies an acceptable variant of a linguistic term and a definition of the linguistic term.

In rejecting claim 39, the Examiner inexplicably argues that claim 39 is a program product of method claim 23, and is thus rejected under the same rationale (Office Action, page 8). With all due respect, claims 23 and 39 recite substantially different features, and the rationale used to reject claim 23 is completely irrelevant to claim 39.

Claim 39 relates to the use of a tag in a document that identifies an acceptable variant of a linguistic term and a definition of the linguistic term. As described in the Application at page 24, lines 1-8, and illustrated in Fig. 12, a tag, e.g., an HTML-type tag, may be incorporated into a document to permit the author of a document to explicitly insert an accepted usage of a particular linguistic term into the document. Applicants can find no passage in Ravin that is even arguably relevant to this concept. Certainly, the fact that the documents in Ravin may be Internet documents falls far short of disclosing a specific tag format that defines an acceptable usage of a linguistic term along with its definition. Indeed, Ravin does not even disclose storing a definition for a term, much less doing so in a tag.

Applicants therefore respectfully submit that independent claim 39 is non-obvious over Ravin et al. and the other prior art of record. Reconsideration and allowance of claim 39 are therefore respectfully requested.

Next turning to the rejection of independent claim 42, this claim generally recites a method of managing an electronic dictionary. The method includes detecting a spell

definition tag within a document retrieved from the Internet that identifies an acceptable variant of a linguistic term, and in response to detecting the spell definition tag, automatically adding the acceptable variant of the linguistic term to an electronic dictionary.

Again, the Examiner relies on Ravin, but combines the reference with the previously-cited reference to Angiulo. The Examiner argues that, with respect to Ravin, the reference discloses the use of a tag at col. 23, lines 52-58 and col. 24, lines 7-12. These passages, however, merely disclose the processing of online documents and spell checking, and are completely silent with respect to tags.

The Examiner also asserts that it is implied that when spell checking is carried out, the identification of an accepted variant of a term is performed via detecting a tag in a document. This statement, however, has no support on the record. Applicants respectfully request that the Examiner provide a citation to some reference that provides support for such a statement, as Applicants are aware of no reference in the art that discloses that conventional spell checking uses tags in the manner suggested by the Examiner.

The Examiner does acknowledge that Ravin does not disclose automatically adding an acceptable variant to an electronic dictionary. However, the Examiner once again relies on the same passages previously cited from Angiulo, and in particular the conventional capability of a spell checker in scanning a document and being updated by a user with a spelling that is not found in an electronic dictionary.

Irrespective of such teaching, however, Angiulo, like Ravin, does not disclose a spell definition tag, and no objective evidence has ever been presented that supports the Examiner's contention that it would be obvious to use a tag for the specific reason recited in claim 42. Applicants submit that the fact that tags in web documents are known falls far short of disclosing or suggesting a specific type of tag that can be embedded in a document and used to automatically add a term to an electronic dictionary. Angiulo discloses at the most that a user, when presented with a term that is not in an electronic dictionary, can opt to manually add that term to the electronic dictionary. Angiulo does not even suggest that a term can be added automatically to an electronic dictionary in

response to any operation other than a manual operation that is initiated by a user when an unrecognized term is found during a spell check, much less in response to detecting a particular type of tag that is embedded in a retrieved document.

The spell definition tag recited in claim 42 provides a unique and unexpected advantage over Ravin, Angiulo and the other art of record, by potentially enabling the author of a document to automatically cause an electronic dictionary for the reader of a document to be updated with an acceptable variant of a term. Put another way, a document created by one individual can cause the electronic dictionary for another individual to automatically add a term. Moreover, it is important to note that the claimed operation need not occur when a spell check operation is being performed, but rather occurs in response to a tag being detected in a document that is retrieved from the Internet. There is no disclosure in either reference that even arguably suggests such functionality.

Applicants therefore respectfully submit that claim 42 is patentable over the prior art of record. Reconsideration and allowance of claim 42, as well as of claim 43 which depends therefrom, are therefore respectfully requested.

Next, with respect to the various pending dependent claims, Applicants traverse the Examiner's rejections based upon the dependency of these claims upon the aforementioned independent claims. However, Applicants do note that the patentability of a number of these claims was argued in Applicants' prior Appeal Brief, and the new citation of Ravin does little to rebut these arguments. In the interest of prosecutorial economy, however, Applicants have declined to argue these claims individually at this time.

As a final matter, the Examiner will note that new claim 44 has been added. This claim depends from claim 1, and additionally recites that "tracking relative occurrences of the plurality of variants of the linguistic term includes accumulating a count of the relative occurrences of a variant found in multiple documents among the plurality of documents." Support for this amendment may be found, for example, at pages 6, 16 and 21 of the Application as filed. As noted above in connection with claim 1, Ravin does not disclose or suggest tracking relative occurrences over multiple documents. As such,

the reference likewise does not disclose accumulating a count of such occurrences found in multiple documents. Consideration and allowance of claim 44 are therefore respectfully requested.

In summary, Applicants respectfully submit that all pending claims are novel and non-obvious over the prior art of record. Reconsideration and allowance of all pending claims are therefore respectfully requested. If the Examiner has any questions regarding the foregoing, or which might otherwise further this case onto allowance, the Examiner may contact the undersigned at (513) 241-2324. Moreover, if any other charges or credits are necessary to complete this communication, please apply them to Deposit Account 23-3000.

Respectfully submitted,

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Date

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